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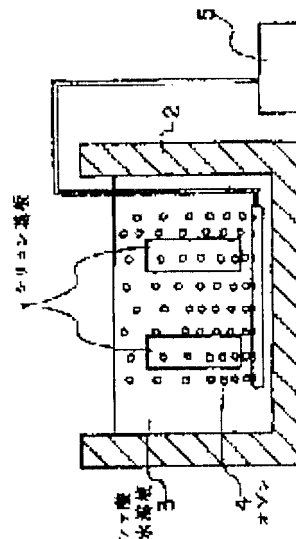
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(54) METHOD FOR ETCHING SILICON SUBSTRATE

(57)Abstract:

PURPOSE: To etch the surface of a silicon substrate without generating a harmful gas by dipping the substrate in an aq. hydrofluoric acid soln. bubbled with ozone.

CONSTITUTION: The surface of a silicon substrate 1 is etched to remove a mechanically strained layer and contaminants. In this case, an aq. hydrofluoric acid soln. 3 having 1% concn., for example, is charged into an etching tank 2 and heated to about 25°C, the bubbles 4 of the ozone from a ozone bubbler 5 are formed in the soln. 3, and the substrate 1 is dipped in the soln. Consequently, harmful NO₂ gas is not generated as in the conventional case where an aq. hydrofluoric acid-nitric acid soln. is used, when the substrate 1 is etched.



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